10/058,661

Art Unit:

2136

## **AMENDMENTS TO THE CLAIMS:**

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

## **Listing of Claims:**

1. (Original) A cryptographic system (1) comprising

first cryptographic algorithm means (2) for enabling cryptographic operations, input/output means (3, 4) for receiving input streams and sending output streams wherein said input streams are transformed to said output streams by said cryptographic operations,

at least one test plaintext  $P_i$  and for each test plaintext  $P_i$  a corresponding test ciphertext  $C_i$ ,

receiving means (5) for receiving a control stream which is including at least one apoptosis key  $K_{\rm i}$ ,

checking means (6) for checking whether said at least one test ciphertext  $C_i$  is the enciphered image of the corresponding test plaintext  $P_i$  under the cryptographic operation of said first cryptographic algorithm means (2) when using said apoptosis key  $K_i$ ,

switching means (7) for stopping said cryptographic operations with said first cryptographic algorithm means (2), wherein said stopping by said switching means (7) is triggered by said checking means (6).

2. (Original) System as claimed in claim 1, wherein said cryptographic system (1) includes at least one second cryptographic algorithm means (8) wherein said switching means (7) enables switching to said at least one second cryptographic algorithm means (8).

10/058,661

Art Unit:

2136

3. (Original) System as claimed in claim 1, wherein

said receiving means (5) is made for accepting control streams which include at least one plaintext  $P_i$ , for each plaintext  $P_i$  a corresponding ciphertext  $C_i$  and a corresponding apoptosis key  $K_i$  and

said checking means (6) is made for trying to find a test plaintext  $P_i$  and a test ciphertext  $C_i$  equal to said received plaintext  $P_i$ , wherein said checking is done with said apoptosis key of said equal test plaintext  $P_i$  and said equal test ciphertext  $C_i$ .

- 4. (Original) System as claimed in claim 1 further comprising a cascaded list of different cryptographic algorithm means.
- 5. (Original) A method for creating a cryptographic system (1) for carrying out cryptographic operations characterized by the steps of

implementing within said cryptographic system (1) a first cryptographic algorithm enabling said cryptographic operations,

selecting at least one test plaintext  $P_i$  and enciphering each test plaintext  $P_i$  with said first cryptographic algorithm and with a corresponding apoptosis key  $K_i$  thereby generating a corresponding test ciphertext  $C_i$  for each test plaintext  $P_i$ ,

implementing within said cryptographic system (1) said at least one test plaintext  $P_i$  and for each test plaintext  $P_i$  said corresponding test ciphertext  $C_i$ 

implementing within said cryptographic system (1) receiving means (5) for receiving a control stream which is including at least one apoptosis key  $K_{\rm i}$ ,

implementing within said cryptographic system (1) checking means (6) for checking whether said at least one test ciphertext  $C_i$  is the enciphered image of the corresponding test plaintext  $P_i$  under said first cryptographic algorithm when using

10/058,661

Art Unit:

2136

said apoptosis key K<sub>i</sub>,

implementing within said cryptographic system (1) switching means (7) for stopping said cryptographic operations with said first cryptographic algorithm, wherein said stopping by said switching means (7) is triggered by said checking means (6).

6. (Original) Method as claimed in claim 5, further comprising the step of

implementing within said cryptographic system (1) at least one second cryptographic algorithm for said ciphering operations, and switching by said switching means (7) to said at least one second cryptographic algorithm.

- 7. (Original) Method as claimed in claim 5, further comprising the step of publishing said at least one test plaintext  $P_i$  and for each test plaintext  $P_i$  said corresponding test ciphertext  $C_i$ .
- 8. (Original) A method for operating a cryptographic system (1) for carrying out cryptographic

operations characterized by the steps of

providing a first cryptographic algorithm for enabling said cryptographic operations, receiving input streams and sending output streams wherein said input streams are transformed to said output streams by said cryptographic operations, receiving a control stream which is including at least one apoptosis key  $K_i$ , checking whether a test ciphertext  $C_i$  is the enciphered image of a corresponding test plaintext  $P_i$  under said first cryptographic algorithm when using said apoptosis key  $K_i$ , stopping said

10/058,661

Art Unit:

2136

cryptographic operations with said first cryptographic algorithm, if said test ciphertext  $C_i$  is the enciphered image of said corresponding test plaintext  $P_i$  under said first cryptographic algorithm when using said apoptosis key  $K_i$ .

9. (Currently Amended) Method as claimed in claim 8, further comprising the step of

switching to one of <u>a plurality of said</u> second cryptographic algorithms for said cryptographic operations after said stopping.

10. (Currently Amended) Method as claimed in claim 8, wherein

said receiving of a control stream includes for each apoptosis key  $K_i$  receiving of a plaintext  $P_i$  and a corresponding ciphertext  $C_i$ , and

said checking includes trying to find a test plaintext  $P_i$  and a test ciphertext  $C_i$  equal to said received plaintext  $P_i$ , and said received ciphertext  $C_i$ , wherein said checking is done with said apoptosis key of said equal test plaintext  $P_i$  and said equal test ciphertext C.

11. (Original) A computer software product for operating a cryptographic system (1) for carrying out cryptographic operations, said product is characterized by a computer-readable medium in which program instructions are stored, which instructions, when read by a computer, enable the computer to

perform a first cryptographic algorithm that is enabling said cryptographic operations,

receive input streams and send output streams wherein said input streams are transformed to said output streams by said cryptographic operations,

receive a control stream which is including at least one apoptosis key K<sub>i</sub>,

10/058,661

Art Unit:

2136

check whether a test ciphertext  $C_i$  is the enciphered image of a corresponding test plaintext  $P_i$  under said first cryptographic algorithm when using said apoptosis key  $K_i$ ,

stop said cryptographic operations with said first cryptographic algorithm, if said test ciphertext  $C_i$  is the enciphered image of said corresponding test plaintext  $P_i$  under said first cryptographic algorithm when using said apoptosis key  $K_i$ .

- 12. (Currently Amended) Computer software product as claimed in claim 11 10, wherein said instructions, when read by a computer, enable the computer to perform at least a second cryptographic algorithm and switch to one of a plurality of said at least second cryptographic algorithms for said cryptographic operations after said stopping.
- 13. (Original) Computer program comprising program code means for performing the steps of claim 8 when said program is run on a computer.